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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

ENTERED



April 21, 1999

OFFICE OF
AIR AND RADIATION

TO ALL INTERESTED PARTIES:

Attached is a copy of EPA's FY 1998 Report to Congress, "Implementation of the Waste Isolation Pilot Plant Land Withdrawal Act." Administrator Browner approved this report for transmittal to Congress on April 14, 1999.

The report summarizes the activities and progress the U.S. Environmental Protection Agency (EPA) has made in fulfilling its responsibilities under the Waste Isolation Pilot Plant (WIPP) Land Withdrawal Act of 1992. It fulfills the requirements outlined in Section 23(a)(2) of the Act, which requires EPA to submit an annual report to Congress.

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Attachment



United States
Environmental Protection
Agency

Air and Radiation
(6602J)

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Implementation of the Waste Isolation Pilot Plant Land Withdrawal Act

FY 1998 Report to Congress



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I. EXECUTIVE SUMMARY

The Waste Isolation Pilot Plant (WIPP) Land Withdrawal Act (the Act), Pub. L. No. 102-579, was signed by the President on October 30, 1992. The Act gives the U.S. Environmental Protection Agency (EPA or the Agency) the authority to certify WIPP's compliance with standards developed by EPA for disposal of radioactive waste. The Act supplements EPA's authority, under the Atomic Energy Act and Reorganization Plan No. 3 of 1970, to establish environmental standards that protect the public and the environment from radioactive materials. Previously, EPA had no authority to ensure compliance with its radioactive waste standards. The Act gave EPA that authority and prescribed the regulatory framework for implementing its responsibilities for the WIPP disposal system.

EPA's responsibilities under the Act include:

- 1) issuing final radioactive waste disposal standards that apply to all spent nuclear fuel, high-level radioactive waste, and transuranic waste disposal facilities not characterized under Section 113(a) of the Nuclear Waste Policy Act (notably the proposed repository at Yucca Mountain);
- 2) issuing criteria for the certification of WIPP's compliance with the final disposal regulations;
- 3) certifying WIPP's compliance with the Agency's radioactive waste disposal regulations initially and, if certified, every five years thereafter; and
- 4) verifying WIPP's compliance with all other applicable Federal environmental laws and regulations.

EPA was originally required by the Act to review the Department of Energy's (DOE) test phase and retrieval plans for tests using radioactive waste at the WIPP and, through informal rulemaking, approve or disapprove these plans. On October 21, 1993, DOE announced that radioactive waste tests would not be conducted at the WIPP. Instead, the tests would be replaced with an expanded laboratory program using radioactive and hazardous wastes. EPA also was originally required to evaluate the WIPP's compliance with the no-migration requirements of the Resource Conservation and Recovery Act (RCRA). The 1996 WIPP LWA Amendments subsequently removed all requirements pertaining to the test phase and RCRA no-migration determination.

In Fiscal Year (FY) 1998, the EPA WIPP program:

- Issued proposed certification decision in the *Federal Register* on October 30, 1997.
- Held public hearings in New Mexico in January 1998 on EPA's proposed certification decision; opportunity to testify was announced in the *Federal Register* on December 5, 1997.
- Issued a notice of availability and opportunity to comment in the *Federal Register* on January 27, 1998, on EPA's analysis of the possible impacts of air drilling on the WIPP .
- Notified Secretary of Energy Peña on May 13, 1998, of EPA's determination that the WIPP complies with EPA's disposal regulations and is safe to contain transuranic waste.
- Notified Congress, New Mexico officials, other federal agencies, and environmental and citizen groups, on May 13-15, 1998, of EPA's determination that the WIPP complies with EPA's disposal regulations and is safe to contain transuranic waste.
- Issued a final rule in the *Federal Register* on May 18, 1998, certifying that the WIPP will comply with 40 CFR Part 191 and 40 CFR Part 194, provided that certain conditions are fulfilled.
- Responded to approximately 500 comments received on the proposed certification decision. Issued in May 1998, an 800-page Response to Comments Document on EPA's certification decision.
- Issued approximately 700 pages of compliance application review documents to support EPA's final certification decision on May 13, 1998.
- Issued a notice of availability and opening of public comment period in the *Federal Register* on May 21, 1998, on quality assurance and waste characterization program documents used by DOE to certify Rocky Flats Environmental Technology Site to ship transuranic waste to the WIPP.
- Issued a notice of availability and opening of public comment period in the *Federal Register* on June 24, 1998, on quality assurance and waste characterization program documents applicable to transuranic waste from Idaho National Engineering and Environmental Laboratory proposed for disposal at the WIPP.
- On September 30, 1998, provided guidance to DOE on reporting to EPA

changes in activities or conditions pertaining to the disposal system that differ from the most recent compliance application.

- On February 26, 1999, issued a letter to DOE approving the Idaho National Engineering and Environmental Laboratory to ship waste to WIPP.
- Maintained four public docket in New Mexico and Washington, DC, and managed a toll-free information line and an Internet home page on EPA's WIPP program.

In FY 98, EPA funded 28.3 staff positions at EPA Headquarters, Region 6 office in Dallas, TX, and Office of Radiation and Indoor Air (ORIA)/Las Vegas Lab in Las Vegas, Nevada, as well as \$2.5 million in contract support for WIPP.

II. INTRODUCTION

With this report the U.S. Environmental Protection Agency (EPA or the Agency) complies with the requirement in Section 23(a)(2) of the Waste Isolation Pilot Plant Land Withdrawal Act, Pub. L. No. 102-579 (the Act), which requires EPA to submit an annual report to the Congress "on the status of, and resources required for the fulfillment of the Administrator's responsibilities under this Act."

The Act, as amended in 1996, gives EPA the authority to oversee many of the Department of Energy's (DOE) activities at the Waste Isolation Pilot Plant (WIPP) throughout the facility's operational and decommissioning phases. The WIPP, which is under development by DOE, is a long-term geologic disposal facility for transuranic radioactive wastes located in southeastern New Mexico. Transuranic wastes are long-lived radioactive wastes generated as by-products from nuclear weapons production and decommissioning.

The Act requires EPA to take the following regulatory actions:

- Issue Radioactive Waste Disposal Standards
Develop environmental protection standards for the disposal of spent nuclear fuel, high-level waste and transuranic radioactive wastes, which will apply to all potential disposal sites except those characterized under the Nuclear Waste Policy Act, as amended (40 CFR Part 191).
- Develop Compliance Criteria
Establish criteria to determine whether the WIPP will comply with the Agency's radioactive waste disposal regulations (40 CFR Part 194).
- Conduct a Compliance Certification
Certify by informal rulemaking whether or not the WIPP complies with the Agency's radioactive waste disposal regulations [63 FR 27354].
- Recertify Periodically
Determine every five years whether or not the WIPP facility continues to be in compliance with the Agency's radioactive waste disposal regulations.

In addition to these regulatory actions, EPA must determine whether documentation submitted by DOE pursuant to Section 9(a)(2) of the Act demonstrates continued compliance with environmental laws, regulations, and permit requirements as described in Section 9(a)(1) of the Act.

This report contains five main sections:

- (1) Implementation Principles -- the foundation of all EPA WIPP activities;

- (2) 1996 WIPP Land Withdrawal Act (LWA) Amendments;
- (3) EPA's Responsibilities Under the LWA: Management and Resources;
- (4) EPA's Responsibilities Under the LWA: Regulatory Activities; and
- (5) Communications and Consultation Activities.

A schedule of important regulatory dates through Fiscal Year 1998 and beyond is provided at the end of the report.

III. IMPLEMENTATION PRINCIPLES

The Act provides EPA with extensive responsibility for establishing whether the WIPP complies with all applicable Federal environmental laws and regulations. The following general principles guide EPA's activities:

Protection

- EPA strives to develop a regulatory program designed to protect present and future generations from the potential risks posed by disposal of waste at the WIPP.

Good Science

- EPA bases its decisions on the best available scientific and technical data, while recognizing that uncertainties about the performance of the WIPP will always exist.

Consultation

- EPA recognizes the important roles of State and local governments, citizen and environmental groups, individual members of the public, industry, and other Federal agencies. The Agency conducts an open public process that includes extensive interaction with stakeholders.

Commitment

- EPA is committed to implement the WIPP legislation effectively and consistently within its legal authority.

IV. 1996 WIPP LAND WITHDRAWAL ACT AMENDMENTS

Amendments to the Act were signed into law by President Clinton on September 23, 1996. Changes that directly affected the EPA activities described in this report are listed below. The Amendments:

1. Removed all requirements pertaining to the test phase that DOE originally planned to conduct, then subsequently determined was unnecessary. EPA is no longer required to undertake any activity related to a test phase.
2. Required DOE to submit all chapters of the compliance application to EPA by October 31, 1996.
3. Removed the requirement that DOE remove all TRU waste from the WIPP and decommission the facility if EPA does not certify compliance within 10 years of the first receipt of waste. The Amendments also repealed a provision allowing a one-time, two-year extension of the 10-year deadline if EPA decides additional time is necessary to complete the certification rulemaking.
4. Exempted transuranic mixed waste designated for disposal at the WIPP from specific treatment standards and land disposal prohibitions of the Solid Waste Disposal Act (42 U.S.C. 6924(m)), including the "no-migration determination."
5. Removed language calling for the removal of waste from the disposal system during the disposal and decommissioning phases in the event that EPA finds DOE not to comply with an environmental law, regulation, or permit requirement, and DOE fails to prepare an adequate remedial plan.
6. Added that DOE shall use engineered and natural barriers and "any other measures (including waste form modifications) to the extent necessary at WIPP to comply with the final disposal regulations."
7. Declared the "sense of Congress" to be that DOE should complete all required actions to commence disposal of transuranic radioactive waste at the WIPP not later than November 30, 1997, provided that WIPP has complied with all applicable laws and health and safety standards.

V. EPA's RESPONSIBILITIES UNDER THE LWA: Management and Resources

Management

To ensure that EPA's oversight responsibilities are performed in a timely and scientifically credible manner, the Agency established an intra-agency committee of senior management to expedite the resolution of policy issues.

The Office of Radiation and Indoor Air (ORIA), which is in the Office of Air and Radiation (OAR), is charged with the primary responsibility for implementing the Act. Other EPA offices with significant roles are the Office of Solid Waste (OSW), the Office of General Counsel (OGC), and EPA Region 6. OSW and Region 6, together with the State of New Mexico, regulate the WIPP's compliance with the Resource Conservation and Recovery Act (RCRA). Region 6 also oversees DOE's demonstration of compliance with all other applicable Federal environmental laws.

Within ORIA, the Center for WIPP in the Radiation Protection Division (RPD) executes most of EPA's responsibilities under the Act. RPD's Outreach Team leads ORIA's WIPP public outreach efforts. Staff-level implementation of the Act is coordinated through an intra-agency work group established by RPD.

Resources

The Act authorizes DOE to transfer funds appropriated for environmental restoration and waste management to the EPA effort through the year 2001. In FY 93, an Interagency Agreement between DOE and EPA funded 33 positions and \$6.5 million for EPA WIPP activities.

In FY 94, DOE funded 25 positions at EPA headquarters and four positions in Region 6, and \$4 million in contract support for WIPP. EPA funded an additional three positions at Headquarters. This level of funding is produced by an interagency agreement between EPA and DOE covering both the WIPP and development of radioactive waste cleanup standards.

In FY 95, EPA funded 25 positions at headquarters and four positions in Region 6, and \$3.4 million in contract support for WIPP. DOE did not fund any EPA WIPP activities after 1994, since monies were appropriated directly to EPA.

In FY 96, EPA funded 21 staff positions at Headquarters, EPA's Region 6 office in Dallas, TX, and ORIA's Laboratory in Las Vegas, NV, as well as \$2.8 million in contract support.

In FY 97, EPA funded 23.7 staff positions at Headquarters, EPA's Region 6 office in Dallas, TX, and ORIA's Laboratory in Las Vegas, NV, as well as \$3.0 million in contract support.

In FY 98, EPA funded 28.3 staff positions at Headquarters, EPA's Region 6 office in Dallas, TX, and ORIA's Laboratory in Las Vegas, NV, as well as \$2.5 million in contract support.

VI. EPA's RESPONSIBILITIES UNDER THE LWA: Regulatory Activities

A. 40 CFR Part 191: Environmental Radiation Protection Standards for the Management and Disposal of Spent Nuclear Fuel, High-Level and Transuranic Radioactive Wastes

The Act requires that EPA promulgate final standards for the disposal of spent nuclear fuel, high-level and transuranic radioactive wastes. The final standards were published in the *Federal Register* on December 20, 1993. Background information on the standards and a summary of their development and content are presented below.

1. Background

On September 19, 1985, EPA issued final radiation protection standards for radioactive wastes: Environmental Radiation Protection Standards for the Management and Disposal of Spent Nuclear Fuel, High-Level and Transuranic Radioactive Wastes in Part 191 of Chapter 40 of the Code of Federal Regulations (40 CFR Part 191). They appear in Volume 50 of the *Federal Register*, beginning on page 38066.

The standards for disposal consist of several types of requirements. According to the Containment Requirements (Section 191.13), waste disposal systems must be designed with the reasonable expectation that the total release of radionuclides—from a disposal facility to the accessible environment—does not exceed specified levels for 10,000 years. The Assurance Requirements (Section 191.14) help to provide additional confidence in reducing the likelihood of radiation releases from or intrusion into the disposal repository. The Individual Protection Requirements (Section 191.15) limit radiation doses to individual members of the public. The Ground Water Protection Requirements (Section 191.16) protect potable sources of ground water by limiting radiation levels in underground sources. Compliance with these requirements is to be determined by means of long-term modeling projections of disposal system performance.

Shortly after the standards were issued, several states and environmental groups mounted legal challenges to them. On July 17, 1987, the Court of Appeals for the First Circuit remanded the standards to the Agency for reconsideration. The WIPP Land Withdrawal Act reinstated all of the sections of the 40 CFR Part 191 disposal standards returned by the court except those that the court found problematic, i.e., aspects of the Individual and Ground Water Protection Requirements, which EPA then revised.

2. The Revised Standards

EPA published proposed amendments to the Individual and the Ground Water Protection Requirements in the *Federal Register* on February 10, 1993. The Agency held hearings in New Mexico that same month to receive comments on the proposal. Following consideration of all written and oral comments received, EPA developed the final disposal standards, which the Administrator signed on December 3, 1993, as an amendment to 40 CFR Part 191. The standards were published in the *Federal Register* on December 20, 1993.

The time frame for assessment of the Individual and the Ground Water Protection Requirements was changed from 1,000 to 10,000 years. The amended Individual Protection Requirements require radioactive waste disposal systems to be designed to provide a reasonable expectation that the annual radiation exposure to any individual in the accessible environment does not exceed 15 millirem committed effective dose. The amended Ground Water Protection Requirements state that release of radioactive materials from disposal systems must not cause the levels of radioactivity in underground sources of drinking water in the accessible environment to exceed the maximum radionuclide contaminant levels specified in regulations promulgated under the authority of the Safe Drinking Water Act.

B. 40 CFR Part 194: Criteria for the Certification of Compliance with 40 CFR Part 191 Disposal Regulations

The Act requires EPA to certify that the WIPP complies with the Agency's final radioactive waste disposal regulations (Subparts B and C of 40 CFR Part 191) before DOE may begin to dispose of transuranic waste in the WIPP. Under the Act, EPA is required to issue criteria upon which the Agency will base its determination of the WIPP's compliance with the disposal regulations.

The final rule promulgating WIPP compliance criteria (40 CFR Part 194) was signed by the Administrator on February 1, 1996, and was published in the *Federal Register* [61 FR 5224] on February 9, 1996. The final compliance criteria contain provisions regarding: 1) the procedures to be used to certify compliance with the 40 CFR Part 191 disposal regulations; 2) the methods to be employed to ensure the adequacy and quality of data and technical analyses; 3) the assumptions on which performance assessments and compliance assessments are to be based; and 4) opportunities for public participation in the certification process.

The Agency promulgated the final rule on compliance criteria after consideration of public comments on the proposed rule. In addition to the traditional method of soliciting the public's written comments during a set public comment period, EPA obtained public comments in several other ways. For example, in February 1995 the Agency hosted a technical workshop in Washington, DC, to discuss several key compliance issues. The workshop was open to the public and involved the participation of experts in several technical disciplines, as well as stakeholder representatives. EPA also held three public hearings in New Mexico (Albuquerque, Carlsbad and Santa Fe) in March 1995 to hear testimony on the proposed rule from the public.

EPA reopened the public comment period on the proposed rule in July 1995, after DOE submitted a draft certification application to EPA, for the purpose of affording stakeholders an additional opportunity to voice concerns about the proposal. During the additional comment period, EPA called a meeting of the WIPP Review Committee of the National Advisory Council for Environmental Policy and Technology (NACEPT). This meeting was held in Albuquerque, New Mexico, in September 1995 and was open to the public.

In preparing the final compliance criteria, the Agency considered the comments it received during both public comment periods, the technical workshop, and the NACEPT meeting. The Agency's rationale for substantive changes to the proposed rule is described in detail in the preamble to the final rule and in the Response to Comments document. The Agency also issued a Background Information Document for the final rule (40 CFR Part 194) in January 1996, providing much of the background information and technical analyses which the Agency used during the development of the final compliance criteria.

Although not a requirement, EPA issued "Compliance Application Guidance (CAG) for the Waste Isolation Pilot Plant: A Companion Guide to 40 CFR Part 194," in March 1996. The Agency developed the CAG to assist the DOE with the preparation of its compliance application by providing format and content instructions and, in turn, to assist the EPA and the general public in reviewing DOE's application.

Three separate lawsuits challenging the final compliance criteria rule were filed against the Agency in the U.S. Court of Appeals for the D.C. Circuit by the Attorney General of New Mexico, the Attorney General of Texas, and two environmental groups in New Mexico. The Court of Appeals denied all of the petitions for review in toto. State of New Mexico v. Environmental Protection Agency, 114 F.3d 290 (D.C. Circuit, 1997).

C. Certification of Compliance with 40 CFR Part 191 Disposal Regulations

1. Review Activities

The Act requires EPA to certify whether the WIPP facility complies with the disposal regulations before DOE may place transuranic waste in the WIPP for disposal. The Act requires that DOE submit an application to EPA to enable the Agency to render a certification determination. DOE delivered the Compliance Certification Application (CCA) to EPA on October 29, 1996. This section describes EPA's process for reviewing the CCA.

EPA announced receipt of the CCA and the Agency's intent to conduct a rulemaking in the *Federal Register* on November 15, 1996, in an Advance Notice of Proposed Rulemaking. After a preliminary review of the CCA, EPA determined that the application was not complete. EPA requested additional information to complete the CCA in December 1996. After receiving application supplements from DOE between January and May 1997, EPA Administrator Carol M. Browner informed Secretary of Energy Federico Peña that the CCA was complete on May 16, 1997. This finding was announced in the *Federal Register* on May 22, 1997.

During the course of its technical review, EPA also sent DOE a series of detailed letters identifying areas where the Agency considered DOE's application to be technically insufficient. DOE in turn responded with a series of letters that sought to address EPA's concerns. All materials and correspondence exchanged by EPA and DOE were placed in EPA's public docket.

EPA utilized the compliance criteria (40 CFR Part 194) to assess the adequacy of DOE's final application for demonstrating the WIPP's compliance with the disposal regulations. EPA evaluated DOE's use of models; the potential for disruptive events that could affect the WIPP's performance over the 10,000-year regulatory time frame; uncertainty, sensitivity, and consequence analyses; field data and site characterization; and quality assurance procedures, among other areas. EPA conducted independent analyses in order to verify the results of DOE's performance assessment. The results of these analyses led EPA to require DOE to complete a modified performance assessment, called a Performance Assessment Verification Test. Additionally, EPA conducted extensive audits and inspections of DOE records and programs, including waste characterization activities at the WIPP and several waste generator sites.

2. Proposed and Final Notice of Certification

EPA received DOE's 84,000-page compliance certification application in October 1996, and immediately began the rulemaking process with publication of an advance notice of proposed rulemaking. After an exhaustive scientific review of DOE's application, consideration of public comments, and performance of independent testing and site inspections, EPA issued a proposed decision in the *Federal Register* on October 30, 1997 [62 FR 58792], that the WIPP complies with the disposal regulations provided that DOE meets certain conditions.

On May 13, 1998, in compliance with the one-year statutory deadline, EPA issued its final certification decision, to certify that the WIPP is safe to contain transuranic waste and will comply with the Agency's radioactive waste disposal regulations. EPA issued a final rulemaking in the *Federal Register* on May 18, 1998 [63 FR 27354].

EPA's final certification decision included four conditions of compliance. EPA found it necessary for DOE to take additional steps to ensure that the measures actually implemented at the WIPP are consistent with DOE's compliance application and with the basis for EPA's decision. These conditions are described below.

First, DOE is required to employ the most robust of the panel seal design options proposed in its compliance application.

Second, at the time of the certification decision, the only waste generator site approved to ship waste to the WIPP for disposal is Los Alamos National Laboratory. No other generator site may ship waste until EPA determines that the site has established and executed the required quality assurance program, as specifically required by the Compliance Criteria.

Third, Los Alamos was approved to ship waste that can be characterized using a certain process, which was approved at the time of the certification decision. No other waste may be shipped to the WIPP until EPA separately approves waste characterization programs for waste generator sites, determining that a generator site has (1) provided information on how process knowledge will be used to characterize the waste in question and (2) implemented a system of controls to confirm that waste components will fall within certain limiting values upon which EPA based its certification, as contemplated by the Compliance Criteria.

Fourth, DOE must submit more detailed implementation plans for passive institutional controls to deter future intruders.

In addition, EPA determined that it is not necessary for DOE to acquire Federal Oil and Gas Leases Nos. NMNM 02953 and NMNM 02953C, as specified in Section 4(b)(5)(B) of the Act. EPA determined that development of the existing

leases would not cause the WIPP to fail to comply with the disposal regulations.

EPA's certification of compliance was conducted pursuant to the informal rulemaking procedures prescribed by the Administrative Procedure Act (5 U.S.C. Section 553). EPA opened a 120-day public comment period on its proposed rule in October 1997 and held public hearings in Albuquerque, Carlsbad, and Santa Fe, New Mexico. EPA also opened a 30-day comment period in January 1998, in order for the public to comment on a report on the potential effects of air drilling in the vicinity of the WIPP. Air drilling was a technical area that attracted considerable public concern during the second public comment period. Although not required to do so, EPA believed it would benefit from reviewing additional public comments on this subject. Based on careful consideration of public comments, EPA issued a final determination in the *Federal Register* on May 18, 1998 [63 FR 27354], that the WIPP will comply with the disposal regulations. Accordingly, the Administrator issued a final certification to the Secretary of Energy, who then notified Congress of DOE's intent to open the WIPP. EPA must recertify compliance with the disposal regulations every five years after disposal operations begin and throughout the facility's operational life, which is expected to be about 35 years.

On July 17, 1998, three petitions for review were filed in the D.C. Circuit Court challenging EPA's final rule certifying the WIPP's compliance with the radioactive waste disposal regulations. These petitions were consolidated by the Court (Case No. 98-1322). The lawsuits challenge the procedures and conclusions of EPA's final decision. The Court set the briefing schedule with final briefs due March 15, 1999, and oral arguments scheduled for May 6, 1999.

3. Continuing Compliance

EPA will continue to monitor WIPP's compliance with EPA's radioactive waste disposal standards. This will be done in several ways, including, site inspections, change reports, and recertification.

Site Inspections

EPA will conduct numerous inspections at waste generator sites in order to implement Conditions 2 and 3 of the compliance certification. EPA's final WIPP certification included the conditions that DOE waste generator sites may not ship waste to the WIPP until two things happen: 1) EPA approves the site's quality assurance program for transuranic waste characterization activities and assumptions; and 2) EPA approves the transuranic waste characterization processes used at the site. Notices announcing EPA inspections or audits specific to the implementation of Conditions 2 and 3, quality assurance and waste characterization at waste generator facilities, are published in the *Federal Register*. EPA will provide an opportunity for the public to submit written comments, for at least 30 days, on the waste characterization and quality assurance program plans submitted by DOE. These documents will be placed in EPA's dockets in Washington, DC and New Mexico. EPA's decisions on whether to approve waste generator site quality assurance program plans and waste characterization systems will be conveyed by letter to DOE and will be placed in the public dockets. EPA will be issuing inspection guidance on its site inspection process in FY 1999.

Los Alamos National Laboratories in New Mexico was the only waste generator site inspected and approved by EPA to ship waste to the WIPP as of the WIPP's certification in May 1998. Los Alamos may only ship transuranic waste that is characterized using the EPA-approved processes. Since issuing its WIPP certification decision, EPA has performed inspections at the Rocky Flats Environmental Technology Site (RFETS) in Colorado and the Idaho National Engineering and Environmental Laboratory (INEEL). EPA issued its approval of INEEL to ship certain waste to WIPP on February 26, 1999. EPA issued its approval of Rocky Flats to ship certain waste to WIPP on March 24, 1999.

There are approximately 20 major sites across the country that store transuranic waste. The DOE Carlsbad Area Office (CAO) determines which sites are eligible to ship waste to the WIPP and audits them for compliance with DOE requirements. As CAO certifies each site, EPA will inspect the site to determine that it also meets EPA's certification requirements. EPA may conduct site inspections to verify continued compliance.

Change Reports

EPA requires at 40 CFR 194.4(b)(4) that DOE report any planned or

unplanned changes in activities or conditions on which EPA's Compliance Certification decision was based. EPA provided DOE with reporting guidance on September 30, 1998, and placed it in EPA's public docket. DOE submitted its first report to EPA on November 13, 1998. EPA is reviewing the changes to assess the impact, if any, on the disposal system. EPA may conduct site inspections to verify continued compliance. DOE's reports and EPA's responses will be placed in the docket for public review.

Recertification

Five years after the initial receipt of transuranic waste for disposal in the WIPP, and every five years thereafter until the end of the decommissioning phase, EPA will evaluate the WIPP's continued compliance with the compliance criteria and disposal regulations. Documentation submitted by DOE will be made available in EPA's docket, and there will be a public comment period of at least 30 days. The Agency's decision on recertification will be announced in the *Federal Register*.

D. Oil and Gas Lease Provisions of the WIPP Land Withdrawal Act

The presence of oil and gas leases below the WIPP site raised concerns about the potential effect of drilling for these resources on the WIPP's ability to contain radionuclides.

Section 4(b)(5)(B) of the WIPP Land Withdrawal Act requires EPA to determine, after consultation with DOE and the Department of the Interior, whether acquisition of oil and gas leases No. NMNM 02953 and No. NMNM 02953C by the DOE is required in order for the WIPP to comply with the radioactive waste disposal regulations (40 CFR Part 191). Under the Act, DOE may not commence disposal of waste at the WIPP until EPA makes this determination.

EPA staff at the Region 6 office in Dallas, Texas and Headquarters evaluated the potential effects on the WIPP of oil and gas drilling at the leases in question. After careful consideration, the Agency determined that it is not possible for drilling to intercept the WIPP, nor is it expected that related practices such as fluid injection would cause the WIPP not to comply with the disposal regulations. It is therefore not necessary for DOE to acquire the leases. EPA proposed this finding together with its announcement of the proposed certification determination for the WIPP on October 30, 1997. In the Agency's final certification decision [63 FR 27354], EPA finalized its finding that DOE does not need to acquire existing oil and gas leases near the WIPP to comply with the disposal regulations.

E. Guidance for 40 CFR Part 191, Subpart A

On September 5, 1996, EPA published a notice in the *Federal Register* announcing the availability of draft "Guidance for Implementation of EPA's Radiation Protection Standards for Management and Storage of Transuranic Waste at the Waste Isolation Pilot Plant." [61 FR 46804] Public comments were accepted on the guidance for a 30-day period. The draft guidance, referred to as the "WIPP Subpart A Guidance," addresses requirements established in the WIPP Land Withdrawal Act and the Federal regulations at 40 CFR Part 191, Subpart A. Subpart A is a generally applicable standard that limits radiation doses to the public from management of radioactive waste at disposal facilities operated by the Department of Energy.

The WIPP Subpart A Guidance is a non-binding document that interprets Subpart A for the WIPP and provides the Agency's recommendations for methods used to demonstrate and document compliance with the standard. The guidance applies to activities that occur during the approximately 35-year operational period, when waste would arrive at the above-ground portion of the WIPP, be unloaded and prepared for emplacement in the underground repository, and lowered down a mechanical hoist and emplaced in the mined-out repository. After considering public comments received on the proposed guidance, EPA issued final guidance in January 1997, the availability of which was announced in the *Federal Register* on February 28, 1997 [62 FR 9188].

F. Compliance with the Resource Conservation and Recovery Act

About 60 percent of the wastes proposed for disposal at the WIPP are called "mixed" waste, containing both hazardous waste subject to the Resource Conservation and Recovery Act (RCRA) and radioactive wastes subject to the Atomic Energy Act. Thus, to the extent DOE places mixed waste in WIPP, WIPP must comply with the regulations developed under RCRA. This section describes EPA's implementation of RCRA requirements with regards to mixed waste.

EPA authorized the State of New Mexico to carry out the State's RCRA program and the State's mixed waste program in lieu of the respective Federal programs. EPA retains authority for those portions of the permit for which New Mexico is not authorized. EPA's Region 6 office provides oversight and technical assistance to the State in processing this permit. The State and EPA will share responsibility for enforcing the conditions of the permit.

A major change in the way RCRA is applied to the WIPP took place in 1996. EPA's Office of Solid Waste (OSW) had been responsible for a "no-migration" determination for the WIPP. However, the WIPP Land Withdrawal Act Amendments, signed by the President in September 1996, exempted the WIPP from the requirements of the RCRA land disposal restrictions because it was determined that the radioactive waste disposal regulations would ensure protection of the public and environment from both the radioactive and hazardous constituents in the waste proposed for disposal in the WIPP. For this reason, OSW terminated its review of DOE's no-migration petition. OSW continues to provide technical assistance to the State of New Mexico and EPA's Office of Radiation and Indoor Air.

The State of New Mexico received a RCRA permit application from DOE in May 1995. The New Mexico Environment Department (NMED) issued a draft RCRA permit for the WIPP on May 15, 1998. The NMED received over 3300 pages of comments from 30 interested parties on the draft RCRA permit during its public comment period which ended on August 14, 1998. A revised draft permit which incorporated comments was issued on November 13, 1998. The comment period on the revised draft permit is ongoing. The hearings on the permit began February 22, 1999. A final permit decision is expected by January, 2000.

G. Compliance With Other Federal Environmental Laws

The Act requires DOE to submit documentation to EPA -- and, where applicable, the State of New Mexico -- every two years to demonstrate WIPP's compliance with all applicable Federal environmental laws, regulations, and permit requirements, including: the radioactive waste management and storage regulations (40 CFR Part 191, Subpart A); the Clean Air Act (CAA); the Toxic Substances Control Act (TSCA); the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); the Solid Waste Disposal Act (SWDA); and the Safe Drinking Water Act (SDWA). This documentation must be submitted throughout the disposal and decommissioning phases of the WIPP. The Agency, and, where applicable, the State of New Mexico, must make a determination of compliance with these statutes, regulations, and permit requirements within six months of receiving DOE's submission. If EPA determines that the WIPP does not comply with any applicable Federal law, regulation or permit requirement, the Agency will require DOE to develop a remedial plan within six months of this determination.

DOE submitted its first Biennial Environmental Compliance Report to EPA in October 1994. EPA determined that this report did not give EPA sufficient information to verify DOE's compliance with all applicable environmental laws, regulations, and permit requirements. In February 1995, EPA provided written guidance to DOE outlining the information that should be included in the biennial report. Additional guidance was sent to DOE in June 1996. DOE subsequently sent a biennial report for the 1994-1996 period to EPA on October 30, 1996.

DOE provided all of the requested information, with the exception of documentation attesting to compliance with DOE orders, notices, and directives pertaining to public health and safety and the environment for the period 1992-1994. After reviewing the information provided, the Agency found DOE to be in compliance with applicable laws for the 1992-1994 and 1994-1996 periods. However, for the 1992-1994 period EPA was unable to determine DOE's compliance with respect to Section 9(a)(1)(G) and, in pertinent part, (H) of the Act. EPA's determinations for both periods were announced in the *Federal Register* on August 20, 1997.

DOE submitted its 1998 Biennial Environmental Compliance Report to EPA on October 30, 1998. The purpose of this Report is to provide documentation to EPA that demonstrates that the WIPP facility was/is in continued compliance with all applicable Federal environmental laws and regulations between 1996 and 1998. EPA will review the Report and publish its compliance determination in the *Federal Register* by May 1, 1999.

VII. COMMUNICATION AND CONSULTATION ACTIVITIES

EPA believes that a successful communication and consultation program informs and enhances the regulatory and oversight process and promotes sound public policy decisions. EPA continues to inform interested parties about its WIPP oversight functions and encourages public participation in the regulatory process.

EPA's toll-free WIPP Information Line (800-331-WIPP) receives about 100 calls each month. The Information Line provides up-to-date, recorded information about public hearings and meetings, publications, and other WIPP activities. Callers may listen to recorded messages in English or Spanish, add their name to the WIPP mailing list, request a WIPP publication, or leave a question for EPA staff.

In an ongoing effort to keep the public well-informed, EPA regularly places all pertinent information about the WIPP in the official docket at EPA Headquarters in Washington, DC, and informational rulemaking dockets located in Carlsbad, Albuquerque, and Santa Fe, New Mexico. The Agency additionally maintains a WIPP home page on the Internet to give the public direct access to important EPA documents.

After proposing its compliance certification decision in October 1997, EPA met with major stakeholder organizations in New Mexico in December 1997 and January 1998. EPA opened a public comment period on its proposed certification decision on October 30, 1997. Another round of public hearings was held in Carlsbad, Albuquerque, and Santa Fe, New Mexico in January 1998 to receive comments on the proposed certification decision. Over 250 people testified at the hearings. The public comment period closed in February 1998. EPA also opened a 30-day comment period on January 27, 1998, in order for the public to comment on a report on the potential effects of air drilling in the vicinity of the WIPP. EPA announced its final certification decision that the WIPP will comply with its radioactive waste disposal regulations on May 13, 1998.

VIII. APPENDIX: WIPP LWA IMPLEMENTATION HIGHLIGHTS

<u>Date</u>	<u>Activity</u>
2/93	Radioactive Waste Disposal Standards proposed in the <i>Federal Register</i> .
2/93	Hearings on Radioactive Waste Disposal Regulations held in New Mexico.
2/93	Advance Notice of Proposed Rulemaking (ANPR) for Compliance Criteria published in the <i>Federal Register</i> .
3/93	Draft Test Phase and Retrieval Plans received from DOE.
3/93	Compliance Criteria ANPR comment period closed.
4/93	Radioactive Waste Disposal Standards comment period closed.
5/93	WIPP Review Committee of the National Advisory Council for Environmental Policy and Technology (NACEPT) Meeting on test phase and retrieval plans held in New Mexico.
9/93	NACEPT WIPP Review Committee meeting on Compliance Criteria held in New Mexico.
11/93	Comments submitted to DOE on December 1992 Preliminary Performance Assessment for the WIPP.
12/93	Final Radioactive Waste Disposal Standards promulgated.
1/95	Proposed Compliance Criteria published in the <i>Federal Register</i> [60 FR 5766].
1/95	First public comment period on Proposed Compliance Criteria opened.
3/95	Public hearings held in New Mexico on Proposed Compliance Criteria.
5/95	First comment period on Proposed Compliance Criteria closed.
5/95	EPA received Draft No-Migration Variance Petition from DOE.
7/95	Second comment period on Proposed Compliance Criteria opened.
9/95	NACEPT WIPP Review Committee meeting on Compliance Criteria

issues held in New Mexico.

- 9/95 Second comment period on Proposed Compliance Criteria closed.
- 10/95 Notice of Availability of Draft Compliance Application Guidance Document announced in the *Federal Register*.
- 2/96 Final Compliance Criteria published in the *Federal Register*.
- 3/96 Final Compliance Application Guidance released.
- 3/96-9/96 Review of Draft Chapters of DOE Compliance Certification Application.
- 9/96 Availability of draft EPA Guidance for the implementation of 40 CFR 191, Subpart A, at the WIPP announced in the *Federal Register*.
- 10/96 DOE Compliance Certification Application received by EPA; EPA commences review of application for completeness and technical adequacy.
- 11/96 ANPR for the compliance certification announced in the *Federal Register*.
- 1/97 EPA staff meet with New Mexico stakeholders to discuss issues related to Compliance Certification Application.
- 2/97 Public hearings held in New Mexico on the ANPR for the compliance certification.
- 2/97 Availability of final EPA Guidance for the implementation of 40 CFR 191, Subpart A, at the WIPP announced in the *Federal Register*.
- 5/97 EPA announces in the *Federal Register* that the Compliance Certification Application is complete.
- 8/97 EPA announces in the *Federal Register* that the WIPP is in compliance with applicable Federal environmental laws and regulations (other than the disposal regulations) for the periods 1992-94 and 1994-96.
- 10/97 Notice of Proposed Rulemaking for the certification determination published in the *Federal Register*. EPA proposes to find the WIPP in compliance, with four conditions. Public comment period opened.
- 12/97 and 1/98 EPA staff meet with New Mexico stakeholders to discuss issues related to the Agency's proposed certification determination.

- 1/98 Public hearings held in New Mexico on the NPR for the compliance certification.
- 1/98 Issued in *Federal Register* air drilling report for public comment.
- 2/98 Public comment period on the proposed certification determination closed.
- 5/98 Final certification decision for the WIPP published in the *Federal Register*.
- 5/98 Issued in *Federal Register* notice of availability and opportunity to comment on quality assurance and waste characterization documents used by DOE to certify the Rocky Flats Environmental Technology Site to ship waste to WIPP.
- 6/98 Issued in *Federal Register* notice of availability and opportunity to comment on quality assurance and waste characterization documents used by DOE to certify the Idaho National Engineering and Environmental Laboratory to ship waste to WIPP.
- 9/98 Provided DOE guidance on reporting to EPA changes in activities or conditions pertaining to the disposal system that differ from the most recent compliance application.
- 2/99 Issued a letter to DOE approving the Idaho National Engineering and Environmental Laboratory to ship waste to WIPP.